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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/595,998	06/14/2006	Sang Yong Bae	56587.22	1534
	7590	EXAMINER		
720 OLIVE STREET			UBER, NATHAN C	
SUITE 2400 ST. LOUIS, MO 63101		ART UNIT	PAPER NUMBER	
			3622	
			NOTIFICATION DATE	DELIVERY MODE
			06/24/2008	ELECTRONIC

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

pto-sl@huschblackwell.com

	Application No.	Applicant(s)					
Office Action Comments	10/595,998	BAE ET AL.					
Office Action Summary	Examiner	Art Unit					
	NATHAN C. UBER	3622					
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
1) Responsive to communication(s) filed on 14 Ju	ne 2006.						
· <u> </u>	action is non-final.						
	/ <del></del>						
	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims	•						
_ \ <u>_</u> \							
	Claim(s) <u>1-17</u> is/are pending in the application.						
	4a) Of the above claim(s) is/are withdrawn from consideration.						
·	5) Claim(s) is/are allowed.						
6) Claim(s) <u>1-17</u> is/are rejected.							
7) Claim(s) is/are objected to.							
8) Claim(s) are subject to restriction and/or election requirement.							
Application Papers							
9)☐ The specification is objected to by the Examiner.							
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority under 35 U.S.C. § 119							
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>							
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)	4)  Interview Summary Paper No(s)/Mail Da 5)  Notice of Informal Pa	te					
Paper No(s)/Mail Date <u>24 May 2006</u> . 6) Other:							

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#### **DETAILED ACTION**

#### Status of Claims

1. This action is in reply to the filing of the necessary documents for a complete national stage entry application, those documents filed on 14 June 2006.

2. Claims 1-17 are currently pending and have been examined.

## **Information Disclosure Statement**

3. The Information Disclosure Statement filed on 24 May 2006 has been considered. An initialed copy of the Form 1449 is enclosed herewith.

### Claim Rejections - 35 USC § 112

- **4.** The following is a quotation of the second paragraph of 35 U.S.C. 112:
  - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 5. Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 5 is directed to a system, but also discloses method steps. Claims that contain limitations directed to more than one statutory category are ambiguous. See MPEP 2173.05(p)(II).
- 6. Claims 4-5 and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The limitations *upper concept* and *lower concept* are used to limit *expansion keyword*. Although the limitation *expansion keyword* is known and understood in the art, the meaning of an *upper* and *lower concept* of an *expansion keyword* is not known in the art and an explanation is absent from the specification. For the purposes of this examination, Examiner

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interprets *upper* and *lower concept* together to embrace any *expansion keyword* and does not lend patentable weight to the distinction that Applicant suggests exist between the two.

### Claim Rejections - 35 USC § 101

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

- 8. Claims 1-11 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims are directed to a system, however the system of the claims does not disclose any structure. Examiner interprets the system to be in fact a program, and a program is *per se* not statutory because it is not a proper statutory class of invention.
- 9. Claims 12-16 are rejected under 35 U.S.C. 101 because the claimed invention is directed to nonstatutory subject matter. Based on Supreme Court precedent, a method/process claim must (1) be tied to another statutory class of invention (such as a particular apparatus) (see at least Diamond v. Diehr, 450 U.S. 175, 184 (1981); Parker v. Flook, 437 U.S. 584, 588 n.9 (1978); Gottschalk v. Benson, 409 U.S. 63, 70 (1972); Cochrane v. Deener, 94 U.S. 780, 787-88 (1876)) or (2) transform underlying subject matter (such as an article or materials) to a different state or thing (see at least Gottschalk v. Benson, 409 U.S. 63, 71 (1972)). A method/process claim that fails to meet one of the above requirements is not in compliance with the statutory requirements of 35 U.S.C. 101 for patent eligible subject matter. Here claim 12 fails to meet the above requirements because it is not tied to a second statutory class. The last limitation of claim 12 claims controlling the adopted advertisement data and further defines the advertisement data of the claim as the data to be displayed on the user terminal. Although the user terminal is a second statutory class of invention, here it is not sufficiently tied to the claim because it comprises merely non-functional descriptive material in the claim. Claims 13-16 inherit the deficiencies of claim 12, and because they do not tie in a second statutory class they are also not statutory under 35 U.S.C. §101.

10. Claim 17 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The *computer readable record medium recording a program for...* of claim 17 is not a process, machine, manufacture, or composition of matter, or any improvement thereof. Replacing *program* with "a computer-executable program" is a suggestion for how to bring this claim into compliance with 35 U.S.C. 101 because "a computer-executable program product tangibly embodied on a computer readable medium" is functional whereas the broadest

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reasonable interpretation of *a program* that is not "computer-executable" is not functional.

Claim 5 is rejected under 35 U.S.C. 101 because the claim is not directed to a statutory class of invention, but instead embraces or overlaps two different statutory classes of invention. 35 U.S.C.
101 sets forth the proper statutory classes of invention in the alternative only. See MPEP 2173.05(p)(II).

### Claim Rejections - 35 USC § 102

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- of record within the body of this action for the convenience of the Applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply. Applicant, in preparing the response, should consider fully the entire reference as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

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14. Claims 1-7, 9, 12-13 and 15-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Dean

et al. (U.S. 2004/0059708 A1).

#### Claim 1:

Dean, as shown, discloses the following limitations:

an advertisement database for maintaining advertisement data of a plurality
of advertisements, a keyword related to each said advertisement and a
category corresponding to each said advertisement (see at least Figure 2,
ltem 240),

 a content database for maintaining a content identifier for identifying content provided to a user terminal though a communication network, and a category related to the content (see at least Figure 2, Item 240),

- an advertisement data searching unit for searching the advertisement database for advertisement data corresponding to a category related to the content to be searched (see at least Figure 260, Item 260),
- an advertisement data selecting unit for selecting a portion of advertisement data among the searched advertisement data, based on a predetermined criterion, by using a keyword related to the searched advertisement data (see at least Figure 2, Item 260),
- a display control unit for controlling the selected advertisement data to be displayed on the user terminal in association with the searched content (see at least Figure 2, Item 280).

### Claim 2:

Dean, as shown, discloses the following limitations:

the advertisement data selecting unit comprises a keyword searching module for searching the content for a keyword related to the searched advertisement data (see at least ¶0044, analyzing the target document, see also ¶0043 the targeting information may be a keyword, see also ¶0042 the

operations described in ¶¶0043+ describe the function that occurs in the ad selection unit Figure 2, Item 260),

- an exposure point computing module for inspecting at least one selected from a group consisting of the number of the searched keywords, locations thereof in the content and a font style thereof, and computing an exposure point related to the advertisement data based on the result of the inspection; and (see at least ¶0048, documents with greater frequency of targeted terms get greater weight),
- an advertisement data selecting module for selecting a portion of advertisement data among the searched advertisement data, based on the exposure point (see at least ¶0033, ads received from the ad selection unit are ordered by relevance based "on a value indication associated with each ad").

### Claim 7:

Dean, as shown, discloses the following limitation:

the advertisement data selecting module selects the predetermined number
of advertisement data of which the exposure point ranks high (see at least
¶0033, a list of ads are received from the ad selection unit and are ordered
by relevance based "on a value indication associated with each ad").

#### Claim 9:

Dean, as shown, discloses the following limitation:

the advertisement data selecting module sequentially selects a predetermined number of the selected advertisement data during the predetermined period (see at least ¶0033, a list of ads are received from the ad selection unit and are ordered by relevance based "on a value indication associated with each ad", here Examiner broadly interprets predetermined period based on the specification to mean an arbitrary amount of time

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including at least the amount processing time required to complete the

method).

Claim 3:

Dean, as shown, discloses the following limitations:

• keyword database for maintaining a keyword and a similar keyword related

thereto, wherein the similar keyword is a keyword having a similar meaning

to the meaning of the keyword (see at least Figure 2, Item 240),

wherein the advertisement data selecting unit comprises: a keyword

searching module for searching the content for a keyword related to the

searched advertisement data and a similar keyword to the keyword data (see

at least ¶0043 the targeting information may be a keyword. Examiner notes

that this claim is directed only to a module, the intended use of the module

does not carry any patentable weight. Nevertheless ¶0043 discloses the

intended use of the claimed module),

an exposure point computing module for inspecting at least one selected

from a group consisting of the number of the searched similar keywords,

locations thereof in the content and a font style thereof, and computing an

exposure point related to the advertisement data based on the result of the

inspection (see at least ¶0048, documents with greater frequency of targeted

terms get greater weight),

an advertisement data selecting module for selecting a portion of

advertisement data from the searched advertisement data, based on the

exposure point (see at least ¶0033, ads received from the ad selection unit

are ordered by relevance based "on a value indication associated with each

ad").

Claim 4:

Dean, as shown, discloses the following limitations:

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 a keyword database for maintaining a keyword and an expansion keyword related thereto, wherein the expansion keyword is a keyword having a meaning of a upper concept of the meaning of the keyword or a lower concept thereof (see at least Figure 2, Item 240),

- wherein the advertisement data selecting unit comprises: a keyword searching module for searching the content for a keyword related to the searched advertisement data and an expansion keyword related to the keyword (see at least ¶0043 the targeting information may be a keyword.
  Examiner notes that this claim is directed only to a module, the intended use of the module does not carry any patentable weight. Nevertheless ¶0043 discloses the intended use of the claimed module),
- an exposure point computing module for inspecting at least one selected from a group consisting of the number of the searched expansion keywords, locations thereof in the content and a font style thereof, and computing an exposure point related to the advertisement data based on the result of the inspection; and (see at least ¶0048, documents with greater frequency of targeted terms get greater weight),
- an advertisement data selecting module for selecting: a portion of advertisement data from the searched advertisement data, based on the exposure point (see at least ¶0033, ads received from the ad selection unit are ordered by relevance based "on a value indication associated with each ad").

#### Claim 5:

Dean, as shown, discloses the following limitations:

 keyword database for maintaining a keyword, a similar keyword related thereto and an expansion keyword related thereto, wherein the similar keyword is a keyword having a similar meaning to the meaning of the Art Unit: 3622

keyword and the expansion keyword is a keyword having a meaning of a upper concept of the meaning of the keyword or a lower concept thereof (see at least Figure 2, Item 240),

- wherein the advertisement data selecting unit comprises: a keyword searching module for searching the content for a keyword related to the searched advertisement data, a similar keyword related to the keyword and an expansion keyword related thereto keyword (see at least ¶0043 the targeting information may be a keyword),
- an exposure point computing module for inspecting at least one selected from a group consisting of the number of the searched keywords, locations thereof in the content and a font style thereof, and computing a first exposure point related to the advertisement data based on the result of the inspection (see at least ¶0048, documents with greater frequency of targeted terms get greater weight),
- inspecting at least one selected from a group consisting of the number of the searched similar keywords, locations thereof in the content and a font style thereof, and computing a second exposure point related to the advertisement data based on the result of the inspection (see at least ¶0048, documents with greater frequency of targeted terms get greater weight),
- inspecting at least one selected from a group consisting of the number of the searched expansion keywords, locations thereof in the content and a font style thereof, computing a third exposure point related to the advertisement data based on the result of the inspection (see at least ¶0048, documents with greater frequency of targeted terms get greater weight),
- computing an exposure point based on at least one of the first exposure point, the second exposure point and the third exposure point (see at least

¶0048, documents with greater frequency of targeted terms get greater weight),

 an advertisement data selecting module for selecting a portion of advertisement data from the searched advertisement data, based on the exposure point (see at least ¶0033, ads received from the ad selection unit are ordered by relevance based "on a value indication associated with each ad"),

With regard to analyzing advertisements multiple times and calculating multiple *exposure* points, Dean discloses "additionally or alternatively" analyzing multiple words in one document (see at least ¶0048) as well as analyzing meta data (see at least ¶0051).

#### Claim 6:

Dean, as shown, discloses the following limitation:

the exposure point computing module computes the exposure point by giving
a weight to the first exposure point, the second exposure point or the third
exposure point (see at least ¶0051, different value measures/weights may be
used "alternatively or in addition" to each other).

#### **Claims 12 and 17:**

Dean, as shown, discloses the following limitations:

- maintaining advertisement data, a keyword related thereto and a category corresponding thereto, in an advertisement database (see at least ¶0030, ad data stored in databases),
- maintaining a content identifier for identifying content provided to a user terminal through a communication network and a category related to the content, in a content database (see at least ¶0030, content provided to a user is stored in databases),

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 searching the advertisement database for advertisement data corresponding to a category related to the content (see at least ¶0032, ad selection

component),

• selecting advertisement data from the searched advertisement data, based

on a predetermined criterion, by using a keyword related to the searched

advertisement data (see at least ¶0033, ad ordering component),

controlling the adopted advertisement data to be displayed on the user

terminal in association with the content (see at least ¶0034, ad serving

component).

Claim 13:

Dean, as shown, discloses the following limitations:

• maintaining the advertisement database comprises the steps of: receiving a

keyword and advertisement data from an advertiser (see at least ¶0027, ad

entry management component),

receiving selection of a category from the advertiser (see at least ¶0027, ad

entry management component),

storing the received keyword in the advertisement database, in association

with the advertisement data and storing the selected category in the

advertisement database, in correspondence with the advertisement data (see

at least ¶0030, ad data stored in databases).

Claim 15:

Dean, as shown, discloses the following limitations:

• maintaining keywords in a keyword database (see at least ¶0030, ad data

stored in databases),

wherein the step of selecting advertisement data according to a

predetermined criterion from the searched advertisement data by using the

keyword comprises the steps of respectively searching the content for a

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keyword related to the advertisement data (see at least ¶0043, identifying documents by keyword),

- inspecting at least one selected from a group consisting of the number of the searched keywords, locations thereof in the content and a font style thereof, and computing an exposure point related to the searched advertisement data based on the result of the inspection (see at least ¶0048, frequency of keywords),
- selecting advertisement data from the searched advertisement data based on the exposure point (see at least ¶0033, ad ordering component).

#### Claim 16:

Dean, as shown, discloses the following limitations:

- maintaining a keyword, a similar keyword related thereto or an expansion keyword related thereto in a keyword database, wherein the similar keyword is a keyword having a similar meaning to the meaning of the keyword and the expansion keyword is a keyword having a meaning of a upper concept of the meaning of the keyword or a lower concept thereof (see at least ¶0030, ad data stored in databases),
- wherein the step of selecting advertisement data according to a
  predetermined criterion from the searched advertisement data using the
  keyword comprises the steps of respectively searching the content for a
  keyword related to the advertisement data (see at least ¶0043 the targeting
  information may be a keyword),
- searching for a similar keyword related to the searched keyword or an expansion keyword related thereto (see at least ¶0043, using keywords and similar keywords),
- inspecting at least one selected from a group consisting of the number of the searched similar keywords, locations thereof in the content and a font style

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thereof, and computing a first exposure point related to the advertisement data based on the result of the inspection (see at least ¶0048, documents with greater frequency of targeted terms get greater weight),

- inspecting at least one selected from a group consisting of the number of the searched expansion keywords, locations thereof in the content and a font style thereof, and computing a second exposure point related to the advertisement data based on the result of the inspection (see at least ¶0048, documents with greater frequency of targeted terms get greater weight),
- computing an exposure point from the searched advertisement data, based on the first exposure point or the second exposure point (see at least ¶0048, documents with greater frequency of targeted terms get greater weight).

### Claim Rejections - 35 USC § 103

- **15.** The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 16. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
  - 1. Determining the scope and contents of the prior art.
  - 2. Ascertaining the differences between the prior art and the claims at issue.
  - 3. Resolving the level of ordinary skill in the pertinent art.
  - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 17. Claims 8 and 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dean et al. (U.S. 2004/0059708 A1).

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Claims 8 and 10-11:

Dean, as shown, discloses the following limitations:

• the advertisement data selecting module selects predetermined

advertisement data from the searched advertisement data on the basis of the

exposure point and (see at least ¶0033, a list of ads are received from the ad

selection unit and are ordered by relevance based "on a value indication

associated with each ad"),

selects a predetermined number of random advertisement data, during a

predetermined period, from the selected advertisement data (see at least

¶0033, a list of ads are received from the ad selection unit and "may be

ordered based on the value indication")

Dean does not specifically disclose that the ordering may be random. However, there are

only a finite number of ways to order a predetermined list of advertisements for

presentation to a user (including in order of relevancy, based on the rate paid for the ad,

randomly, etc.) Therefore, it would have been obvious for one having ordinary skill in the

art at the time the invention was made to try a different criteria for ordering the

advertisements for presentation to the user (such as random ordering/selection) since

there are a finite number of identified, predictable potential solutions and one having

ordinary skill in the art could have pursued the known potential solutions with a

reasonable expectation of success.

18. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dean et al. (U.S.

2004/0059708 A1) in view of Anick et al. (U.S. 6,778,975 B1).

Claim 14:

Dean discloses the limitations as shown in the rejections above. Dean further discloses

determining relevant advertisement and content topics, however Dean does not

specifically disclose categories as in the limitations below. Anick, as shown, discloses the

following limitations:

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 receiving selection of a category from the advertiser comprises the steps of maintaining categories in a predetermined database (see at least column 6, lines 54-55, advertisers specify categories for their ad submissions),

- providing the categories for the advertiser by a directory searching method (see at least column 5, line 17-27, the categories are predetermined),
- receiving selection of a predetermined category among the provided categories, from the advertiser (see at least column 6, lines 54-55, advertisers specify categories for their ad submissions),

It would have been obvious to one having ordinary skill in the art at the time of the invention to additionally determine advertising relevancy to content using a category organization method since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

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### Conclusion

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Anderson et al. U.S. 2004/0093327, this reference incorporates by reference
Dean, and discloses more methods for associating serving targeted
advertisements with content based on the characteristics determined from
content.

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20. Any inquiry of a general nature or relating to the status of this application or concerning this

communication or earlier communications from the Examiner should be directed to Nathan C

Uber whose telephone number is 571.270.3923. The Examiner can normally be reached on

Monday-Friday, 9:30am-5:00pm. If attempts to reach the examiner by telephone are

unsuccessful, the Examiner's supervisor, Eric Stamber can be reached at 571.272.6724.

21. Information regarding the status of an application may be obtained from the Patent Application

Information Retrieval (PAIR) system. Status information for published applications may be

obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR system,

see http://portal.uspto.gov/external/portal/pair <a href="http://pair-direct.uspto.gov">http://pair-direct.uspto.gov</a>. Should you have

questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at

866.217.9197 (toll-free).

**22.** Any response to this action should be mailed to:

**Commissioner of Patents and Trademarks** 

P.O. Box 1450, Alexandria, VA 22313-1450

or faxed to 571-273-8300.

23. Hand delivered responses should be brought to the United States Patent and Trademark

Office Customer Service Window:

Randolph Building

401 Dulany Street

Alexandria, VA 22314.

/Nathan C Uber/ Examiner, Art Unit 3622 18 June 2008

/Arthur Duran/ Primary Examiner, Art Unit 3622

6/18/2008